

INTERNATIONAL SEARCH REPORT

PCT/IB2004/003186

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H02K5/10 F16J15/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02K F16J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/098548 A1 (BOONE NICK ET AL) 29 May 2003 (2003-05-29)	1, 2, 4
Y	abstract; figures 1, 3, 7 paragraphs '0001!, '0002!, '0006!, '0016!, '0018! - '0022!	3, 5, 6, 8-10
Y	US 6 257 592 B1 (HASHIZAWA SHIGEMI ET AL) 10 July 2001 (2001-07-10) abstract; figures 1A, 1B, 1C, 5, 6 column 1, line 5 - line 44 column 4, line 6 - line 55	3, 5, 8-10
Y	DE 42 35 437 C (GLÖCKLER-DICHTUNGEN GUNTER HEMMRICH GMBH) 2 September 1993 (1993-09-02)	6
A	abstract; figure 4 -/-	3, 9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

* & * document member of the same patent family

Date of the actual completion of the international search

14 December 2004

Date of mailing of the international search report

21/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Flyng, G

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 500 282 A (ISHIKAWA GASKET) 26 August 1992 (1992-08-26) abstract; figures 1-3 -----	3-5, 10
A	EP 1 191 262 A (DFT MASCHB GMBH) 27 March 2002 (2002-03-27) abstract; figures 1-3 -----	1, 2, 4
A	EP 1 045 174 A (BRIDGESTONE CORP) 18 October 2000 (2000-10-18) figure 23; example 6 -----	1-4
A	US 6 150 744 A (ONISHI YOSUKE) 21 November 2000 (2000-11-21) abstract; figures 2A, 2B column 2, line 18 - line 24 -----	1, 10
A	US 5 767 596 A (KECK ARTHUR C ET AL) 16 June 1998 (1998-06-16) cited in the application the whole document -----	1

Continuation of Box II.2

Claims Nos.: 11

Rule 6.2a

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 11
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2003098548	A1	29-05-2003	CN	1421629 A	04-06-2003
			DE	10253901 A1	11-09-2003
			JP	2003202080 A	18-07-2003
US 6257592	B1	10-07-2001	JP	11126647 A	11-05-1999
			DE	19848552 A1	06-05-1999
DE 4235437	C	02-09-1993	DE	4235437 C1	02-09-1993
EP 0500282	A	26-08-1992	US	5259629 A	09-11-1993
			DE	69204182 D1	28-09-1995
			DE	69204182 T2	25-01-1996
			EP	0500282 A1	26-08-1992
			ES	2076678 T3	01-11-1995
			JP	2538996 Y2	18-06-1997
			JP	4122862 U	05-11-1992
			KR	180549 B1	15-04-1999
EP 1191262	A	27-03-2002	AT	411289 B	25-11-2003
			AT	245779 T	15-08-2003
			AT	15202000 A	15-04-2003
			DE	50100402 D1	28-08-2003
			EP	1191262 A1	27-03-2002
EP 1045174	A	18-10-2000	JP	2001041325 A	13-02-2001
			JP	2000356268 A	26-12-2000
			JP	2001056055 A	27-02-2001
			JP	2001227645 A	24-08-2001
			EP	1045174 A2	18-10-2000
			JP	2001227646 A	24-08-2001
US 6150744	A	21-11-2000	CN	2398765 U	27-09-2000
US 5767596	A	16-06-1998	BR	9704953 A	19-01-1999
			CN	1186371 A ,B	01-07-1998
			EP	0834980 A1	08-04-1998
			US	6161274 A	19-12-2000